



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,805	08/22/2001	Tatuya Ninomiya	500.33021CX5	8027
24956	7590	01/06/2005		
MATTINGLY, STANGER & MALUR, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER PATEL, HETUL B	
			ART UNIT 2186	PAPER NUMBER

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/933,805

Applicant(s)

NINOMIYA ET AL.

Examiner

Hetul Patel

Art Unit

2186

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 December 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 03 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☒ The proposed amendment(s) will not be entered because:  
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

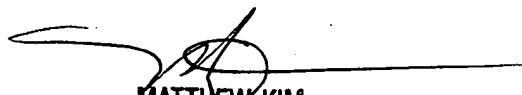
Claim(s) rejected: 21, 23-24, 26-27, 29-32, 34-39 and 41-55.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

Continuation of 5. does NOT place the application in condition for allowance because: As to Remark, Applicant asserted: Both Hashemi and Nakamura fails to teach or suggest that each host adaptor includes a format converter for converting data of a CKD format, in a case where the host adaptor receives the data of the CKD format from the host device, into data of FBA format suitable for storage in the storage devices and sending the converted data of the FBA format to the cache through the path as recited in the claims. Examiner respectfully traverses Applicant's remark for the following reasons:

Examiner agreed with the Applicant that Hashemi does not teach the further limitation of each of said host adaptors includes a format converter to convert data from CKD format to the FBA format and storing the FBA format data in the cache memory. Nakamura, however, teaches a host adapter (the magnetic disk controller, 5 in Fig. 1) includes a data storage format converter that is used to convert data of a count key data (CKD) format sent from the host device (the host computer, 1 in Fig. 1) into data of a fixed block architecture (FBA) format and sending the converted data of the FBA format to said cache memory (6 in Fig. 1) (e.g. see Col. 11, lines 12-20 and Fig. 1). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the current invention was made to employ the format converter as taught by Nakamura in the storage system of Hashemi so the data stored in a CKD format (variable length record format adopted in a magnetic disc system of a general-purpose computer) sent from the host device is converted into data of a FBA format (fixed length format which is adopted in a commercially available miniature type magnetic disc) suitable for the storage devices. By doing so, it would provide improved compatibility by allowing Hashemi's storage system (a) to serve broader range of applications, (b) to be compatible with wide variety of storage devices with different formats (e.g. Magnetic disks, optical disks, flash memory etc.). Therefore, it is being advantageous..

  
**MATTHEW KIM**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100